

Claims

1. A wire protection apparatus for a high frequency motor including a stator, a shaft installed in an inner 5 hollow section of the stator so as to be rotated by means of the stator, and a plurality of bearings supporting both ends of the shaft in order to assist rotation of the shaft, the wire protection apparatus comprising:

10 a main casing partially surrounding the stator, the shaft and bearings and being formed at one side thereof with a wire path for allowing electric wires of the stator to pass through the main casing; and

15 a wire protection member having a tubular structure for allowing electric wires to pass through the wire protection member and being coupled to the wire path of the main casing, wherein electric wires extending from the stator are aligned in such a manner that the electric wires are withdrawn to an exterior without being interrupted by an auxiliary casing detachably coupled to one side of the main casing as to 20 enable a worker to exchange the bearings with new ones.

2. The wire protection apparatus as claimed in claim 1, wherein the electric wires extending from the stator are surrounded by a clad, thereby forming a clad cable, and the 25 clad cable extends from the wire path of the main casing or a part of the wire protection member to an exterior.

3. The wire protection apparatus as claimed in claim 1, wherein the auxiliary casing is detachably coupled to one 30 side of the main casing as to enable a worker to exchange the bearings with new ones and an arcuate guide groove is formed at an outer peripheral portion of the auxiliary bearing so as

to allow the wire protection member to pass through the auxiliary casing.

4. The wire protection apparatus as claimed in claim 5 1, wherein the electric wires extend from the stator or from at least one of a temperature sensor and a position sensor.

5. The wire protection apparatus as claimed in any one of claims 1 to 4, wherein a power supply connector is 10 coupled to exposed ends of the electric wires surrounded by the clad cable.

6. The wire protection apparatus as claimed in claim 1, wherein the wire protection member is screw-coupled with 15 the wire path of the main casing.

7. The wire protection apparatus as claimed in any one of claims 1 to 4, and 6, a ground wire connection ring is installed in the wire path coupled with the wire protection 20 member.